

### **Abstract**

A probe (S) for the extraction of gas from a process environment comprises a tubular element (2), which can be positioned within the process environment. This tubular element has at one end a gas aspiration opening (TS) and defines an internal cavity (CA) by which the interior of the process environment can be put into fluid communication with a gas take off system. The probe further includes a second tubular element (1) extending into the interior of the cavity of the first tubular element (2). This second tubular element has one end (UG) disposed at the aspiration opening end (that is to say the process environment side), formed in such a way as to inject the said accelerated gaseous fluid towards the aspiration opening of the first tubular element (2) and from there back to the process environment. Also envisaged is a system for the extraction of gas from a process environment which can be coupled to the probe, comprising a circuit (40, C) aspirating the gas from the process environment through the cavity (CA) of the first tubular element of the probe (2), and a circuit (50, C) for re-injecting the said gas into the same process environment through the second tubular element of the probe (1).